

28. A telecommunications system according to claim 1, wherein said originating gateway computer includes a component for providing out of band signalling between said originating gateway computer and said originating circuit-switched network.

*Sub*  
*29*  
29. A telecommunications system according to claim 1, wherein at least one of said originating and terminating gateway computers comprises a time-division multiplexing bus interconnecting at least one digital trunk interface with a digital signal processor and an application-specific integrated circuit, and a system bus interconnecting said digital signal processor and said application-specific integrated circuit with a central processing unit and a random access memory.

30. A telecommunication system according to claim 29, wherein said system bus is interconnected with said originating circuit-switched network via a component for out of band signalling.

*b1*  
*cont.*  
31. A telecommunications system according to claim 1, wherein said originating circuit-switched network comprises at least one dedicated address for a caller, and a routing configuration from said dedicated address to said originating gateway computer, said routing configuration being such that a caller's address and a destination address are passed to said originating gateway computer by the originating circuit-switched network and are routed to said terminating gateway computer by an originating routing component.

32. A telecommunications method according to claim 22, wherein said originating digital packets or said return digital packets or both said originating and return digital packets are routed using an address resolution logic and a network routing database implemented with a central processing unit.

*33*  
33. A telecommunications method according to claim 22, wherein said originating network comprises an originating gateway computer, and wherein said

telecommunications method further comprises providing a ring back or busy tone to a telephone connected to said originating network in response to signaling from a component of said originating gateway computer.

34. A telecommunications method according to claim 22 comprising the further steps of estimating the unit charge for a call going through said gateway computer, informing a caller providing said originating voice input about the unit charge, and recording a payment method specified by the caller before providing said terminating voice output.

35. A telecommunications method according to claim 22, wherein said gateway computer is a terminating gateway computer, and wherein said method further comprises:

providing a caller's address and a callee's address to an originating gateway computer in said originating network,

authorizing a call between the caller and the callee using the caller's address,

using the callee's address for said routing of the originating digital packets from the originating network to the terminating gateway computer,

causing the terminating gateway computer to dial out to the callee through said circuit switched network using the callee's address,

and causing the originating gateway computer to provide a return tone for advising the caller of a status of the call.

36. A telecommunications method according to claim 35 comprising the further step of causing the terminating gateway computer to transmit to the originating gateway computer via said packet-switched network a state change caused by the callee's answering said call.

Sub  
D6

37. A telecommunications method according to claim 22, wherein said gateway

computer is an originating gateway computer, wherein said original circuit-switched network comprises at least one dedicated address for a caller and a routing configuration from said dedicated address to said originating gateway computer, and wherein said method further comprises:

routing a call in accordance with said routing configuration from a telephone at said dedicated address to said originating gateway computer,

passing said originating signals, the caller's address and a destination address to the originating gateway computer in accordance with said routing configuration,

authorizing a call by checking account information of the caller through an internal data base of the originating circuit-switched network,

resolving a routing to a terminating gateway computer using the destination address,

and causing the originating gateway computer to send a control message to the terminating gateway computer along with said dedicated address and said destination address.

Please amend the ~~remaining~~ claims as follows:

16. (amended) A telecommunications system according to claim 11, wherein at least one of said routing components provides said routing in response to data [received from] provided by said gateway computer.

17. (amended) A telecommunications system according to claim 11, wherein at least one of said routing components provides said routing in response to a typed input from a computer keyboard.

22. (twice amended) A telecommunications method comprising steps of:  
providing originating digital packets for transmission from an originating network, said originating digital packets corresponding to originating signals produced

in response to originating voice input,

[transmitting] routing said originating digital packets from said originating network to a gateway computer through a packet-switched network in response to an originating routing component in at least one of said originating network and said gateway computer,

converting said originating digital packets into terminating signals for transmission from said gateway computer,

b3  
concl  
transmitting said terminating signals through a circuit-switched network for providing terminating voice output in response to said terminating signals,

providing first return signals to said gateway computer in response to return voice input into said circuit-switched network,

cm  
converting said first return signals into return digital packets of return digital data for transmission from said gateway computer,

[transmitting] routing said return digital packets through said packet-switched network from said gateway computer to said originating network in response to said originating routing component or another routing component in said originating network or said gateway computer,

and converting said return digital packets into second return signals.

---

### REMARKS

Independent claim 1 and claims 4-7, 9-10 and 26-31 dependent thereon, independent claim 11 and claims 14-17 and 19-20 dependent thereon, and independent claim 22 and claims 32-37 dependent thereon, are now being prosecuted in this application. Each of these claims is believed to define an invention that is novel and unobvious over the prior art.

Claims 1-7, 9-17, 19-20 and 22-25 were rejected under 35 U.S.C. §102(a) as being anticipated by an Internet article by C. Yang entitled "INETPhone: Telephone Services and Servers on Internet", April 1995, pages 1-6. To the contrary, the applied